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| 09/554,914      | 08/14/2000  | JAN HEMMINGSSON      | 9847-0050-          | 5033             |

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04/01/2002

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| EXAMINER |
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PEREZ, GUILLERMO

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| ART UNIT | PAPER NUMBER |
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2834

DATE MAILED: 04/01/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

09/554,914

Applicant(s)

HEMMINGSSON, JAN

Examiner

Guillermo Perez

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 18-35 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 18-35 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.  
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

### Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

### Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 6.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_

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## DETAILED ACTION

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

1. Claims 18-21, and 24-26 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lipo et al. (U. S. Pat. 5,376,851) in view of Nikitin et al. (U. S. Pat. 4,429,244).

Lipo et al. substantially teaches the claimed invention except that it does not show that the electric winding have an electric conductor configured to hold a high voltage. Lipo et al. do not disclose that at least one of the plurality of slots have a constant width in the transverse direction.

Nikitin et al. disclose that the electric winding have an electric conductor configured to hold a high voltage (column 3, lines 34-36). Nikitin et al. disclose that at least one of the plurality of slots have a constant width in the transverse direction. The invention of Nikitin et al. has the purpose of raising the voltage across the stator winding.

It would have been obvious at the time the invention was made to modify the electric machine of Lipo et al. and provide it with the electric winding and slot

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configuration disclosed by Nikitin et al. for the purpose of raising the voltage across the stator winding.

2. Claims 22-23, and 27-29 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lipo et al. in view of Nikitin et al. as applied to claims 18 and 21 above, and further in view of G. F. Redfern (GB 468,827).

Lipo et al. and Nikitin et al. substantially teach the claimed invention except that it does not show that at least one of the plurality of slots is at least partially curved in the transverse direction. Neither Lipo et al. nor Nikitin et al. disclose that each of the plurality of slots is curved along the transverse direction, nor that each of the plurality of slots have the same radius of curvature. Neither Lipo et al. nor Nikitin et al. disclose that at least one of the plurality of slots have alternating larger width portions and alternating smaller width portions in the transverse direction. Neither Lipo et al. nor Nikitin et al. disclose that at least one of the alternating larger width portions have a varying width. Neither Lipo et al. nor Nikitin et al. disclose that the alternating larger width portions have a mutually similar width.

G. F. Redfern discloses that at least one of the plurality of slots is at least partially curved in the transverse direction. G. F. Redfern discloses that each of the plurality of slots is curved along the transverse direction, and that each of the plurality of slots have a same radius of curvature. G. F. Redfern discloses that at least one of the plurality of slots have alternating larger width portions and

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alternating smaller width portions in the transverse direction. G. F. Redfern discloses that at least one of the alternating larger width portions have a varying width. G. F. Redfern discloses that the alternating larger width portions have a mutually similar width. G. F. Redfern's invention has the purpose of giving the machine a suitable leakage value.

It would have been obvious at the time the invention was made to modify the electric machine of Lipo et al. and Nikitin et al. and provide it with the slot configuration disclosed by G. F. Redfern for the purpose of giving the machine a suitable leakage value.

3. Claims 30-32, and 34-35 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lipo et al. in view of Nikitin et al. as applied to claim 18 above, and further in view of Elton et al. (U. S. Pat. 5,036,165).

Lipo et al. and Nikitin et al. substantially teach the claimed invention except that it does not show that the at least one full winding turn of the electric conductor is flexible. Neither Lipo et al. nor Nikitin et al. disclose that the electric conductor have an inner semi conducting layer surrounding the electric conductor, an insulating layer surrounding the inner semi conducting layer, nor an outer semi conducting layer surrounding the insulating layer. Neither Lipo et al. nor Nikitin et al. disclose that each of the inner semi conducting layer and the outer semi conducting layer constitutes an equipotential surface.

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Elton et al. disclose that the at least one full winding turn of the electric conductor is flexible. Elton et al. disclose that the electric conductor (102) have an inner semi conducting layer (104) surrounding the electric conductor (102), an insulating layer (106) surrounding the inner semi conducting layer (104), and an outer semi conducting layer (110) surrounding the insulating layer (106). Elton et al. disclose that each of the inner semi conducting layer (104) and the outer semi conducting layer (110) constitutes an equipotential surface. The invention of Elton et al. has the purpose of avoiding the development of a corona discharge when an electrical potential exists between the conductor and the region adjacent the exterior surface of the insulator.

It would have been obvious at the time the invention was made to modify the electric machine of Lipo et al. and Nikitin et al. and provide it with the electric conductor configuration disclosed by Elton et al. for the purpose of avoiding the development of a corona discharge when an electrical potential exists between the conductor and the region adjacent the exterior surface of the insulator.

It would have been obvious to one having ordinary skill in the art at the time the invention was made to make the conductor capable of holding a voltage greater than 72 kV since it has been held that where the general conditions of a claim are disclosed in the prior art, it is not inventive to discover the optimum or workable ranges by routine experimentation. *In re Aller*, 220 F.2d 454, 456, 105 USPQ 233, 235 (CCPA 1955).

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4. Claim 33 is rejected under 35 U.S.C. 103(a) as being unpatentable over Lipo et al. in view of Nikitin et al., and further of Elton et al. as applied to claim 32 above, and further in view of Penczynski et al. (U. S. Pat. 3,959,549).

Lipo et al., Nikitin et al., and Elton et al. substantially teach the claimed invention except that it does not show that the inner semiconducting layer and the outer semiconducting layer have a substantially same coefficient of thermal conductivity as the insulating layer.

Penczynski et al. disclose that the inner semiconducting layer and the outer semiconducting layer (6,20) have a substantially same coefficient of thermal conductivity as the insulating layer (column 4, lines 37-40). The invention of Penczynski et al. has the purpose of improving the mechanical elasticity of the insulation.

It would have been obvious at the time the invention was made to modify the machine of Lipo et al., Nikitin et al., and Elton et al. and provide it with the layers configuration disclosed by Penczynski et al. for the purpose of improving the mechanical elasticity of the insulation.

#### **Conclusion**

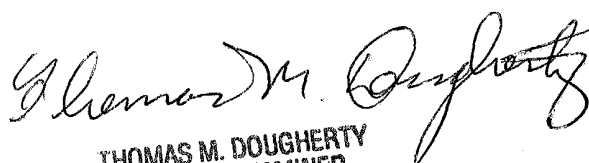
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Guillermo Perez whose telephone number is (703) 306-5443. The examiner can normally be reached on Monday through Thursday and alternate Fridays.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nestor Ramirez can be reached on (703) 308 1371. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 305 3432 for regular communications and (703) 305 3432 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308 0956.

Guillermo Perez  
March 22, 2002

  
THOMAS M. DOUGHERTY  
PRIMARY EXAMINER  
GROUP 2100  
2200